SI METRIC INCH/POUND CONVERSION FACTORS

| Inch/pound | Metric |
|---|---|
| **Length** | |
| 1 mil=25.4 micrometers (μm)* | 1 micrometer= 0.039370 mil. |
| 1 inch=2.54 cm* | 1 millimeter=0.039 370 in. |
| 1 foot=30.48 cm* | 1 centimeter=0.393 701 in. |
| 1 yard=0.9144m* | 1 meter=3.280 84 ft. |
| **Area** | |
| 1 square inch=6.4516 $cm^2$* | 1 square centimeter=0.155 000 $in^2$. |
| 1 square foot=929.0304 $cm^2$* | 1 square decimeter=0.107 639 $ft^2$. |
| =9.290 304 $dm^2$ | 1 square meter=10.763 9 $ft^2$. |
| 1 square yard=0.836 127 $m^2$. | |
| **Volume or Capacity** | |
| 1 cubic inch=16.3871 $cm^3$ | 1 cubic centimeter=0.061 023 7 $in^3$. |
| 1 cubic foot=0.028 316 8 $m^3$ | 1 cubic decimeter=0.035 314 7 $ft^3$. |
| =2.83 168 $dm^3$ | 1 cubic meter=35.314 7 $ft^3$. |
| 1 cubic yard=0.764 555 $m^3$ | =1.307 95 $yd^3$. |
| 1 fluid ounce=29.573 5 mL | 1 milliliter=0.033 814 0 fluid oz. |
| 1 liquid pint=473.177 mL | 1 liter=1.05669 liquid quart. |
| =0.473 177 L | 1 liter=0.264 172 gallon. |
| 1 liquid quart=946.353 mL | 1 dry pint=550.610 5 mL. |
| =0.946 353 L | 1 dry quart=1.101 221 L. |
| 1 gallon=3.785 41 L | 1 dry peck=8.809 768 L. |
| 1 bushel=35.2391 L. | |
| **Weight or Mass** | |
| 1 ounce=28.349 5 g | 1 milligram=0.000 035 274 0 oz. |
| 1 pound=453.592 g | =0.015 432 4 grain. |
| =0.453 592 kg | 1 gram=0.035 274 0 oz. |
| | 1 kilogram=2.204 62 lb. |

*Exactly.
NOTE: These conversion factors are given to six significant digits to provide such accuracy when necessary.

(b) The SI metric quantity declaration should be shown in three digits except where the quantity is below 100 grams, milliliters, centimeters, square centimeters or cubic centimeters, where it can be shown in two figures. In either case, any final zero appearing to the right of a decimal point need not be shown.

(*Examples:* ''1 lb (453 g)'' not ''1 lb (453.592 g)''; ''Net Wt. 2 oz (56 g)'' or ''Net Wt 2 oz (56.6 g)'' not ''Net Wt. 2 oz (56.69 g)''.)

### § 500.20 Conspicuousness.

The statement of net quantity of contents shall appear in conspicuous and easily legible boldface type or print in distinct contrast (by typography, layout, color, embossing, or molding) to other matter on the package; except that a statement of net quantity blown, embossed, or molded on a glass or plastic surface is permissible when all label information is so formed on the surface.

### § 500.21 Type size in relationship to the area of the principal display panel.

(a) The statement of net quantity of contents shall be in letters and numerals in a type size established in relationship to the area of the principal display panel of the package or commodity and shall be uniform for all packages or commodities of substantially the same size. For this purpose, ''area of the principal display panel'' means the area of the side or surface that bears the principal display panel, exclusive of tops, bottoms, flanges at tops and bottoms of cans, and shoulders and necks of bottles and jars. This area shall be:

(1) In the case of a rectangular package or commodity where one entire side properly can be considered to be a principal display panel side, the product of the height times the width of that side;

(2) In the case of a cylindrical or nearly cylindrical container or commodity, 40 percent of the product of the height of the container or commodity times the circumference; and

(3) In the case of any otherwise shaped container or commodity, 40 percent of the total surface of the container or commodity: *Provided,* however, that where such container or commodity presents an obvious ''principal display panel'' such as the top of a triangular or oval shaped container, the area shall consist of the entire top surface.

(b) With area of principal display panel defined as above, the type size in relationship to area of that panel shall comply with the following specifications:

(1) Not less than 1/16 inch (1.5 mm) in height on packages the principal display panel of which has an area of 5 square inches or (32.2 $cm^2$) less.

(2) Not less than 1/8 inch (3.1 mm) in height on packages the principal display panel of which has an area of more than 5 (32.2 $cm^2$) but not more than 25 square inches (161 $cm^2$).

(3) Not less than 3⁄16 inch (4.7 mm) in height on packages the principal display panel of which has an area of more than 25 (161 $cm^2$) but not more than 100 square inches (6.45 $dm^2$).

(4) Not less than ¼ inch (6.35 mm) in height on packages the principal display panel of which has an area of more than 100 square inches (6.45 $dm^2$), except not less than ½ (12.7 mm) inch in height if the area is more than 400 square inches (25.8 $dm^2$).

(c) Where the statement of net quantity of contents is blown, embossed, or molded on a glass or plastic surface rather than by printing, typing, or coloring, the lettering sizes specified in paragraph (b) of this section shall be increased by 1⁄16 of an inch (1.5 mm).

(d) Letter heights pertain to upper case or capital letters. When upper and lower case or all lower case letters are used, it is the lower case letter ''o'' or its equivalent that shall meet the minimum standards.

(e) The ratio of height to width of a letter shall not exceed a differential of 3 units to 1 unit (no more than 3 times as high as it is wide).

(f) When fractions are used, each component shall meet one-half the minimum height standards.

(g) The type size requirements specified in this section do not apply to the ''e'' mark. (See § 500.6(b).)

(h) When upper and lower case or all lowercase letters are used in SI metric symbols, it is the uppercase ''L,'' lowercase ''d,'' or their equivalent in the print or type used that shall meet the minimum height requirement. Other letters and exponents must be presented in the same type style and in proportion to the type size used. However, no letter shall be less than 1.6 mm (1⁄16inch) in height.

### § 500.22 Abbreviations.

The following abbreviations and none other may be employed in the required net quantity declaration:

Inch—in.
Feet or foot—ft.
Fluid—fl.
Liquid—liq.
Ounce—oz.
Gallon—gal.
Pint—pt.
Pound—lb.
Quart—qt.
Square—sq.
Weight—wt.
Yard—yd.
Avoirdupois—avdp.
Cubic—cu.

NOTE: Periods and plural forms shall be optional.

### § 500.23 Expression of net quantity of contents in SI Metric units.

(a) The selected multiple or submultiple prefixes for SI metric units shall result in numerical values between 1 and 1000, except that centimeters or millimeters may be used where a length declaration is less than 100 centimeters. For example, ''1.96 kg'' instead of ''1960 g'' and ''750 mL'' instead of ''0.75 L''.

(b) The following symbols for SI metric units and none others may be employed in the required net quantity declaration:

centimeter—cm
cubic centimeter—$cm^3$
cubic decimeter—$dm^3$
meter—m
milligram—mg
liter—L or l
milliliter—mL or ml
square decimeter—$dm^2$
cubic meter—$m^3$
kilogram—kg
micrometer—µm
gram—g
millimeter—mm
square meter—$m^2$
square centimeter—$cm^2$

NOTE: Symbols, except for liter, are not capitalized. Periods should not be used after the symbol. Symbols are always written in the singular form.

### § 500.24 Supplemental statements.

Nothing contained in the regulations in this part shall prohibit supplemental statements, at locations other than the principal display panel, describing in non-deceptive terms the net quantity of contents: *Provided* that such supplemental statements of net quantity of contents shall not include any term qualifying a unit of weight or mass, measure, or count that tends to exaggerate the amount of commodity contained in the package. (Examples of prohibited language are: ''Giant Quart,'' ''Jumbo Liter,'' ''Full Gallon,'' ''When Packed,'' ''Minimum,'' or words of similar import.) Required combination declarations of net quantity of